

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of producing nanoparticles, with a mean diameter equal to or less than 1 μm , and incorporating at least one active ingredient, ~~characterized in that it comprises~~ comprising the following steps:

- a) preparing an aqueous chitosan solution,
- b) preparing an aqueous glucomannan solution, and
- c) mixing, under stirring, the solutions of steps a) and b), such that the chitosan and glucomannan nanoparticles are obtained,

wherein at least one of the solutions of steps a) and b) contains at least one active ingredient.

2. (Currently Amended) A method of producing nanoparticles according to claim 1, ~~characterized in that~~ wherein the glucomannan solution contains an anionic salt.

3. (Currently Amended) A method of producing nanoparticles according to claim 2, ~~characterized in that~~ wherein the anionic salt is sodium tripolyphosphate.

4. (Currently Amended) A method of producing nanoparticles according to claim 3, ~~characterized in that~~ wherein the sodium tripolyphosphate is at a concentration between 0.1 and 5 mg/mL.

5. (Currently Amended) A method of producing nanoparticles according to ~~any of claim~~[[s]] 1 to 4, ~~characterized in that~~ wherein the concentration of the chitosan solution is in the range between 0.5 and 5 mg/mL.

6. (Currently Amended) A method of producing nanoparticles according to ~~any of claim~~[[s]] 1 to 5, characterized in that wherein the concentration of the glucomannan solution is in the range between 0.5 and 50 mg/mL.

7. (Currently Amended) A method of producing nanoparticles according to ~~any of claim~~[[s]] 1 to 4, characterized in that wherein the ratio between chitosan and glucomannan is between 1:0.1 and 1:100.

8. (Currently Amended) A method of producing nanoparticles according to ~~any of claim~~[[s]] 1 to 4 and 7, characterized in that wherein the ratio between chitosan and glucomannan is between 1:0.5 and 1:50.

9. (Currently Amended) A method of producing nanoparticles according to ~~any of claim~~[[s]] 1 to 8, characterized in that wherein the chitosan solution has a pH between 2 and 6.

10. (Currently Amended) A method of producing nanoparticles according to ~~any of claim~~[[s]] 1 to 9, characterized in that wherein the active ingredient is a bioactive macromolecule.

11. (Currently Amended) A method of producing nanoparticles according to ~~any of claim~~[[s]] 1 to 10, characterized in that wherein the active ingredient is chosen from the group comprising consisting of insulin, bovine serum albumin and immunogenic proteins.

12. (Currently Amended) A method of producing nanoparticles according to ~~any of claim~~[[s]] 1 to 9, characterized in that wherein the active ingredient is a low molecular weight drug.

13. (Currently Amended) A method of producing nanoparticles according to ~~any of claim~~[[s]] 1 to 9 and 12, characterized in that wherein the active ingredient is ~~chosen~~ selected from the group comprising consisting of acyclovir and indomethacin.

14. (Currently Amended) A method of producing nanoparticles according to ~~any of~~ claim[[s]] 1 to 13, ~~characterized in that it further comprises~~ comprising an additional step after step c), ~~in which of lypholizing the nanoparticles are lyophilized.~~

15. (Currently Amended) Nanoparticles with a diameter equal to or less than 1 μm , for the administration of at least one active ingredient, ~~characterized in that they comprise~~ comprising chitosan, glucomannan and at least one active ingredient.

16. (Currently Amended) Nanoparticles according to claim 15, ~~characterized in that they are obtainable produced by means of~~ the method according to claim[[s]] 1 to 11.

17. (Currently Amended) Nanoparticles according to ~~any of~~ claim[[s]] 15 and 16, ~~characterized in that they further comprise~~ comprising an anionic salt.

18. (Currently Amended) Nanoparticles according to claim 17, ~~characterized in that~~ wherein the anionic salt is sodium tripolyphosphate.

19. (Currently Amended) Nanoparticles according to ~~any of~~ claim[[s]] 15 to 18, ~~characterized in that~~ wherein the active ingredient is a bioactive macromolecule.

20. (Currently Amended) Nanoparticles according to ~~any of~~ claim[[s]] 15 to 19, ~~characterized in that~~ wherein the active ingredient is selected from the group ~~comprising~~ consisting of insulin, bovine serum albumin and immunogenic proteins.

21. (Currently Amended) Nanoparticles according to ~~any of~~ claim[[s]] 15 to 18, ~~characterized in that~~ wherein the active ingredient is a drug of low molecular weight.

22. (Currently Amended) Nanoparticles according to any of claim[[s]] 15 to 18 and 21, ~~characterized in that~~ wherein the active ingredient is selected from the group ~~comprising~~ consisting of acyclovir and indomethacin.

23. (Currently Amended) Nanoparticles according to ~~any of claim[[s]] 15 to 22~~ characterized ~~in that~~ wherein the chitosan:glucomannan ratio is between 1:0.02 and 1:100.

24. (Currently Amended) Nanoparticles according to ~~any of claim[[s]] 15 to 23~~, characterized ~~in that~~ wherein the chitosan:glucomannan ratio is between 1:0.5 and 1:50.

25. (Currently Amended) Nanoparticles according to ~~any of claim[[s]] 15 to 22~~, characterized ~~in that~~ wherein the ~~the~~ particles are lyophilized after they are obtained.

26. (Currently Amended) A pharmaceutical composition, ~~characterized in that it comprises~~ comprising the nanoparticles according to ~~any of claim[[s]] 15 to 24~~ and at least one pharmaceutically acceptable excipient.

27. (Currently Amended) A cosmetic composition, ~~characterized in that it comprises~~ comprising the nanoparticles according to ~~any of claim[[s]] 15 to 24~~ and at least one cosmetically acceptable excipient.

28. (Currently Amended) A pharmaceutical composition, ~~characterized in that it comprises~~ comprising the nanoparticles of claim 25, wherein after the particles are ~~being~~ regenerated by means ~~of the~~ addition of water, and at least one pharmaceutically acceptable excipient.

29. (Currently Amended) A cosmetic composition, ~~characterized in that it comprises~~ comprising the nanoparticles of claim 25, wherein after ~~being~~ the particles are regenerated by means ~~of the~~ addition of water, and at least one cosmetically acceptable excipient.